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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MYERS, PAUL R

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/822,143	Applicant(s) CHO, DAE-WOO	
	Examiner Paul R. Myers	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 4 has been considered but are moot in view of the new ground(s) of rejection.

In regards to applicants argument that Lien et al is directed to inserting and removing an adapter while the computer system remains fully operational: The examiner agrees. That is why the claims were rejected under 35 USC 103 over the combination of Lien and Clark. The computer of Lien is a laptop which are commonly powered off and powered on. While the examiner suspects that the computer of Lien would operate in the manner of the applicants claimed computer were a new card inserted when the computer of Lien is powered off. However since Lien et al is silent upon how his computer would behave if a card was inserted when the system is powered off, then the system were powered on. It is possible that in the above senerio that the owner of the computer of Lien would have to remove the adapter then reinsert it to get the driver to install instead of installing at boot up. Clark expressly teaches that when a system with an expansion card is booted, the expansion BIOS is loaded from the expansion card. Thus it would have been obvious to a person of ordinary skill in the art at the time of the invention to have also loaded the driver of the adapter of Lien when the system is booted because this would have prevented the owner of the computer of Lien from having to remove and reinsert all adapters to load the drivers each time the computer system of Lien is powered on.

In regards to applicants argument that there is no teaching or suggestion that the adapter attribute information storage 13 stores the driver program. Lien teaches that in step S6 the attribute information is read from the adapter then in step S8 the device driver is read from the

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adapter. While Lien expressly teaches storage 13, in the adapter, storing the attribute information, Lien is silent upon where in the adapter the driver program is stored. It would have been obvious to a person of ordinary skill in the art at the time of the invention to have the driver program that is stored in the adapter be stores in storage 13 since it is clearly an accessible storage because this would have prevented having to provide another storage just for the driver program.

In response to applicants traverse of taking notice. Applicant has attempted to challenge the Examiner's taking of Official Notice. However, Applicant has not provided adequate information or argument that *on its face* creates a reasonable doubt regarding the circumstances justifying the Official Notice. See MPEP 2144.03 and In re Boon, 169 USPQ 231 (CCPA 1971). The examiner also notes in the prior art already cited for example Crosswy et al PN 5,325,532 teaches storing information in the proper reserved areas and that these areas are called "partitions". Thus Crosswy et al provides the requested evidentiary support.

In regards to applicants argument regarding claim 6: The applicants are correct claim 6 should have been grouped with claim 5 instead of claim 3.

In regards to applicants argument regarding claim 4: The examiner misread claim 4: The examiner read claim 4 as saying that the scripiter file is operable to detect information and it is on the operating system not that the scripiter file is operable to detect information about the operating system. Claim 4 should have been grouped with claim 5. Due to this very minor error in interpretation of claim 4 this action is made non final.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5 and 6 recites the limitation "the scripter file" however a scripter file was introduced in claim 4 not claim 3 upon which these claims depend. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 10-13, 17-18, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lien et al PN 5,386,567 in view of Clark PN 5,448,045.

In regards to claims 1, 10, 17-18, 21: Lien et al teaches a computer system (1 and 2) having a display device (Screen on figure 1), an input device (Keyboard or camera), a storage medium (5), a processor (4), an operating system (OS), and a local bus (7 and 8) capable of performing data transmission with the processor for a predetermined timing, the computer system comprising: at least one extension slot (9 and 10), provided in the computer system, operable to connect with the local bus (7,8); and at least one interface card (2), detachably mounted in the extension slot, operable to load built-in driver programs (S8) and environmental setting values (S7) to the operating system (OS). Lien et al teaches the programs are loaded

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when the adapter card is inserted as opposed to when the computer system is booted. Clark teaches (Column 9 lines 26-36 and Figure 8) when a system is booted in a state that an expansion card connects to an expansion slot the expansion BIOS is loaded from the expansion card. It would have been obvious to a person of ordinary skill in the art at the time of the invention to also load the adapter control software from the adapter when the system is booted as well as when the card is inserted because this would have prevented a need to remove the adapted and reinsert it each time the system is rebooted.

In regards to claim 2: Lien et al teaches the interface card including an interface module (the pins 14-16) connectable with the local bus (via electrical connector 9); and a memory device (13) operable to store the driver programs when said driver programs make the interface module recognized to the operating system and the environmental setting values.

In regards to claims 3, 11-13 and 22: Lien teaches the driver programs and environmental settings being stored in the memory on the adapter. Lien does not expressly teach the memory being partitioned. Official notice is taken that memory partitions are common. It would have been obvious to partition the memory because this would have allowed for an organized memory management.

6. Claims 4-6, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lien et al PN 5,386,567 in view of Clark PN 5,448,045 as applied to claim 3 above, and further in view of Sherer et al PN 5,459,854.

In regards to claims 4-6, 14-16: Lien et al teaches loading the device driver to the operating system as described above. Lien et al is silent upon the device driver being the correct

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device driver for the operating system. Sherer teaches loading software based upon the architecture of the system including operating system. Script files such as Autoexec.bat and Config.sys or and of the multiple .ini files are notoriously well known. It would have been obvious to load the correct device driver for the operating system because this would have allowed Lien's system to function properly.

In regards to claim 23: Lien teaches the driver being stored in an accessible memory in the adapter. Script files are notoriously well known with their only requirement being that they are stored in an accessible memory when needed. It would have been obvious to store the scripter file in the memory with the Driver because this would have kept the data together and would have allowed for an organized memory management. See also MPEP 2144.04 V B.

In regards to claim 24: Sherer teaches loading software based upon the architecture of the system including operating system.

7. Claims 8-9, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lien et al PN 5,386,567 in view of Clark PN 5,448,045 and Sherer et al PN 5,459,854 as applied to claim 1 above, and further in view of Hitz et al PN 5,485,579.

In regards to claim 7: Lien et al teaches loading the device driver to the operating system as described above. Lien et al is silent upon which operating system is used. Sherer teaches UNIX and DOS operating systems. Hitz et al teaches a with multiple operating systems in which a virtual file system is used to allow for different operating systems. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a virtual file system because this would have allowed for ease in dealing with multiple different operating systems.

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In regards to claims 8 and 19: Lien et al does not teach a virtual file system. Hitz et al teaches a with multiple operating systems in which a virtual file system is used to allow for different operating systems. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a virtual file system because this would have allowed for ease in dealing with multiple different operating systems.

In regards to claims 9 and 20: Hitz teaches a tree structure.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

PN 6,704,824 to Goodman teaches installing the correct driver based upon the detected operating system (Column 5 lines 57-65).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 571 272 3639. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PRM
July 31, 2006

PAUL R. MYERS
PRIMARY EXAMINER